REMARKS

A. Background

Claims 39-67 and 89-94 were pending in the application at the time of the Office Action with claims 1-38 and 68-88 being withdrawn from consideration. Claims 40 and 89-94 were allowed. Claims 39, 42-45, 54, 57, 63, 65 and 66 were rejected as being obvious over cited prior art. Claims 41, 46-53, 55, 56, 58-62, 64, and 67 were objected to as being dependent upon a rejected base claim but were otherwise allowable. By this response applicant has amended claims 39 and 57. As such, claims 39-67 and 89-94 are again presented for the Examiner's consideration in light of the following remarks with claims 1-38 and 68-88 being withdrawn from consideration.

B. Proposed Amendments

Claims 39 and 57 have been amended so as to clarify the claim language. Applicant submits that the amendment to the claims do not introduce new matter and entry thereof is respectfully requested.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached pages are captioned VERSION WITH MARKINGS TO SHOW CHANGES MADE.

C. Rejections on the Merits

Paragraphs 2 and 3 of the Office Action rejected claims 39, 42-45, 54, 57, 63, 65, and 66 under 35 U.S.C § 103(a) as being obvious over U.S. Patent No. 5,595,444 to Tong et al., in view of U.S. Patent No. 5,682,149 to Hofman.

The Tong patent discloses "methods of detecting poor meat quality in live animals using infrared thermography." (Abstract). In general, the method of Tong comprises: (1) scanning an area of each animal in a group of live domestic animals, (2) determining the temperature of each animal, (3) determining the central tendency of the temperature for the group of animals, and (4) rejecting the animals having a high probability of producing poor meat quality, the rejected animals being those whose individual temperature differs the most from the group's temperature. (Col. 4 lines 3-16). More specifically, Tong discloses that

> groups of live domestic animals arrive at the plant in truckloads of about 40 or more animals. Each animal of the group is scanned with the infrared camera positioned to view a relevant, discrete and consistent anatomical site. The digitalized data output from the camera is used to determine the mean temperature for each animal's image, the mean temperature for the group of animal images, and the average deviation, or more preferably the standard deviation. Animals are rejected after comparing the individual animal mean temperature with the group mean temperature. Animals whose mean temperature differs from the group mean by more than about 0.9 standard deviations, or more preferably, by more than 1.28 standard deviations are rejected as animals having a high probability of producing poor meat quality.

Col. 6, lines 48-62.

Although Tong discloses taking the temperature of the **group** of animals over a period of time (col. 6, lines 14-17), Tong only discloses determining the temperature of each animal one time. These individual temperatures are then used to calculate the mean temperature and the standard deviation for the group of animals. Since Tong only discloses obtaining a single body temperate from each animal, Tong does not disclose or suggest "a) obtaining measurements corresponding to **a body temperature of the animal at periodic sampling intervals**," as recited in claim 39. Furthermore, because Tong does not obtain the measurements of element "a)" for a given animal at periodic sampling intervals, Tong cannot "applying an algorithm to the measurements obtained from a)," as also recited in claim 39.

Finally, the only potential algorithms that are at least suggested in Tong relate to: determining the temperature of a given animal based on infrared camera data, calculating the mean temperature of the group of animals, and calculating the standard deviation from the individual temperatures of the group of animals. Applicant submits that none of these potential algorithms "cumulatively takes account of **variations in the body temperature of the animal over time**," as also recited in claim 39.

Hofman discloses a measuring device for the wire-free measurement of the body temperature of animals. By continually monitoring the body temperature, one can determine whether an animal is becoming ill. (Abstract). In general, the electronic device in Hofman receives and then returns an electrical signal. The returning signal flip flops between two distinct frequencies. The animal's body temperature is determined by applying an algorithm to the time delay between the switch from the first frequency to the second frequency. (Col. 7, lines 1-7). Specifically, [t]he time interval of the cyclic switching during the sequence of alternating tones is determined and processed, and the temperature is determined therefrom." Col. 7, lines 18-20.

Hofman thus suggests an algorithm that is capable of determining the temperature of an animal for each of the time periods illustrated in Figure 3. However, because Hofman is only interested in knowing the temperature of the animal at different times, Hofman does not disclose or suggest an algorithm which "cumulatively takes account of **variations in the body temperature of the animal over time**," as recited in claim 39. That is, Hofman discloses an algorithm that can repeatedly determine the temperature of an animal at different periods of time. Based on the teachings in Hofman, however, the algorithm operates independent of prior or subsequent body temperatures or related measurements. As such, Hofman does not disclose or suggest an algorithm that "cumulatively takes account of variations in the body temperature of the animal over time."

Since neither Tong nor Hofman disclose or suggest "applying an algorithm to the measurements obtained from a) which algorithm cumulatively takes account of variations in the body temperature of the animal over time," as recited in claim 39, applicant submits that the combination of Tong and Hofman does not disclose or suggest the invention as recited in claim 39.

Furthermore, applicant submits that it would not be obvious to combine the teachings of Tong with the teachings of Hofman because the inventions teach away from each other. Tong teaches a "time saving" method where "animals may be rejected after a single scan once the group statistics [are] established." Col. 7, lines 14-17. Because Tong teaches a time saving method which eliminates the need to measure the temperature of an animal more than once, applicant submits that it would not be obvious to combine Tong with Hofman where the object of Hofman is to repeatedly and continually measure the temperature of each animal.

Claims 42-45 and 54 depend from claim 39 and thus incorporate the limitations thereof. As such, applicant submits that claims 42-45 and 54 are distinguished over the cited prior art for at least the same reasons as discussed above with regard to claim 39.

Applicant submits that claim 57 is distinguished over the cited prior art for substantially the same reasons as discussed above with regard to claim 39. Specifically, applicant submits that Tong and Hofman do not disclose or suggest, either independently or in combination, a "processor operable to implement an algorithm to the measurements, **which algorithm cumulatively takes account of variations in the body temperature of the animal over time**, wherein the processor has output means for providing the result of the algorithm," as recited in claim 57.

Claims 63, 65, and 66 depend from claim 57 and thus incorporate the limitations thereof. As such, applicant submits that claims 63, 65, and 66 are distinguished over the cited prior art for at least the same reasons as discussed above with regard to claim 57.

Paragraphs 4 and 5 of the Office Action stated that claims 40, 41, 46-53, 55-56, 58-62, 64, 67, and 89-94 were either allowed or rejected as being dependent upon a rejected claims. As such, these claims are not discussed herein.

No other objections or rejections are set forth in the Office Action.

D. Conclusion

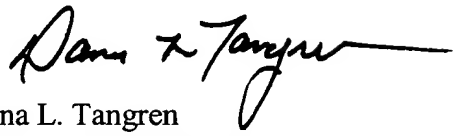
Applicant notes that this response does not discuss every reason why the claims of the present application are distinguished over the cited prior art. Most notably, applicant submits that many if not all of the dependent claims are independently distinguishable over the cited prior art. Applicant has merely submitted those arguments that it considers sufficient to clearly distinguish the claims over the cited prior art.

In view of the foregoing, applicant respectfully requests the Examiner's reconsideration and allowance of claims 39-67 and 89-94 as amended and presented herein.

In the event there remains any impediment to allowance of the claims which could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate such an interview with the undersigned.

Dated this 30 day of May 2003.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Claims 39 and 57 have been amended as follows:

39. (Three Times Amended) A method of providing an indication of at least one of meat quality, pH levels, and stress levels in an animal, the method comprising:

a) obtaining measurements corresponding to a body temperature of the animal at periodic sampling intervals;

b) applying an algorithm to the measurements obtained from a), which algorithm cumulatively takes account of variations in the body temperature of the animal over time; and

c) comparing the results of the algorithm to a predetermined threshold.

57. (Three Times Amended) A system for providing an indication of at least one of meat quality, pH levels, and stress levels in an animal to be slaughtered, the system comprising:

a body mountable measurement device for obtaining measurements corresponding to the body temperature of the animal at periodic sampling intervals over a period of between 3-36 hours; and

a processor having input means for receiving the measurements from the measurement device, the processor operable to implement an algorithm to the measurements, which algorithm cumulatively takes account of variations in the body temperature of the animal over time, wherein the processor has output means for providing the result of the algorithm.